TERM AGREEMENT
CATEGORIES OF SERVICE

The following descriptions and minimum requirements for prequalification are to be use as a guide in determining areas of specialization/expertise for which firms may apply for prequalification.

Where the minimum qualification indicates Idaho licensing or registration, that individual must be a full-time employee who has acted in a leadership role on previous projects. Sub-consultants, individuals who have committed to work for the firm in the future, or persons on retainers can not be used to meet the minimum requirements for pre-qualification, except as allowed in the environmental area. The experience of the individuals must be relevant to the category of service, and the work must have been performed within the last three years.

Firms must also have support staff (engineers and/or technicians) with pertinent experience or training. The lack of relevant experience or training of the support staff may result in non-prequalification.

Firms must be specific in listing all experience which qualifies them for each category.

At the department's discretion, firms requesting prequalification may be required to submit additional documentation outlining their past experience and capabilities of current staff.

A. BRIDGES & STRUCTURES

Idaho professional engineering license required.

A1. Design

This category of service consists of the comprehensive design of structures, including all detailing (except shop details), the determination of all plan quantities, plans and specifications. Structures shall be designed in accordance with current AASHTO Specifications for Highway Bridges and the procedures outlined in the ITD Bridge Design Manual, using the specified design loading. Services may include review and checking submitted shop drawings and designer related support during construction.

A2. Inspection

This category of service consists of the routine inspection of bridges as described in 23 CFR 650.300 and the AASHTO Manual for Condition Evaluation of Bridges. In addition to performing bridge inspections, services include preparation of reports for each bridge in electronic format, inventorying new bridges and meeting with local highway officials to discuss maintenance needs of their bridges. Services may also include scheduling and performing supplemental inspections and performing in-depth bridge inspections.

A3. Hydraulics

Possible areas of service include preparation of hydraulic reports for bridges and culverts, design of storm drains, drainage and irrigation facilities, bridge scour evaluations, and evaluation of flood potential and hazards. The consultant shall follow the procedures outlined in the ITD Design Manual and as directed by the Hydraulics Engineer.

A4. Load Rating

This category of service consists of the analysis of bridges to determine their live load carrying capacities in accordance with the AASHTO Manual for Condition Evaluation of Bridges. Inventory and operating ratings shall be calculated for the H and HS trucks and also for Idaho's Type 3, 3S2, 3-3 and 121 kip trucks. Analysis methods may include any of the following: allowable stress, load factor, and load and resistance factor. Deliverables shall be in an electronic format as specified by ITD.

B. ROADWAY DESIGN Idaho professional engineering license required.

B1. General Roadway Design

Possible areas of service include:

Concept Study. A benefit cost analysis is prepared on all alternatives utilizing surveying and mapping, topography, and the materials investigation. Design criteria and controls used in developing alternatives shall be in accordance with the procedures outlined in the ITD Design Manual. Services may include the completion of the Concept Report including preliminary cost estimate.

Project Development. The design of any or all phases of a highway in accordance with the procedures outlined in the ITD Design Manual, including outline specifications. The design shall conform to applicable standards.

Other areas of service: Clearances, permits, railroad encroachments and crossings, utilities, hearings, and location and/or design study report.

B2. Traffic Services

Traffic Control, Signalization, Signing, and Lighting. Possible areas of service include delineation, signing, illumination, construction traffic control plan, pavement markings, traffic signals, railroad crossings, and intersection layout and design. The design of all traffic control devices shall conform to the Manual on Uniform Traffic Control Devices for Streets and Highways as adopted by the State, and be performed in accordance with procedures outlined in the ITD Traffic Manual and Design Manual.

Capacity Analysis. Includes capacity calculations for freeways and other multi-lane roadways, two-lane roads and signalized as well as un-signalized intersections. Also includes analysis of passing needs and opportunities. For signalized intersections, includes preparation of signal timing and coordination plans.

Transportation Impact Studies. Preparation of transportation impact studies or review of transportation impact studies prepared by others. Studies shall be prepared in accordance with the ITD Requirements for Transportation Impact Study.

B3. Pathways

This category consists of design of bicycle facilities and/or pedestrian pathways in accordance with ITD Design Manual and ASSHTO standards. Areas of work include planning, concept preparation, design, estimates, specifications, construction support, and operation and maintenance cost considerations.

C. SURVEY & MAPPING

All work furnished shall be documented and stamped by the responsible professional licensed in the State of Idaho. All files shall be in MicroStation format.

C1. Location Survey

Surveys required to furnish all data for design of highways, bridges, buildings, drainage and/or irrigation, and may require the following:

a. Determine centerline control for highway corridor

b. Hydraulics information including canals, streams, rivers and drainage systems

c. Locate established wetland areas

d. Aerial mapping control and map certification

e. GPS (Global Positioning by Satellite) services for mapping control, land line establishment, topographic surveys or other surveys which may require this type of survey. May require knowledge and equipment necessary to incorporate existing NGS control into the project control.

f. Topographic Maps. Maps for highway corridors on other improvements which furnish all natural or man-made features, in vertical and horizontal position, on manuscript or electronically. These maps may require aerial mapping manuscripts and photos at specified standard accuracy.

g. Establish vertical control along highway using NGS and ITD control

C2. Construction Survey

Must be licensed in the State of Idaho as a Professional Land Surveyor or Professional Engineer, both with experience in construction surveys acceptable to the Idaho Transportation Department.

Surveys to furnish all staking for control of vertical and horizontal positions of roadways, structures, and right-of-ways. This work will require the ability to work from plans and contracts to furnish the necessary surveys to maintain required accuracy for all phases of the project. Excavation and embankment for roadways or buildings, and quantity measurement for all linear or volume item measurements.

C3. Land Survey

Must be licensed in the State of Idaho as a Professional Land Surveyor.

Surveys to determine boundary lines, monument re-establishment and corner perpetuation. Write legal descriptions for property acquisition. Produce Record of Surveys and Right-of-Way Plats.

C4. Global Positioning Survey (GPS)

This work may be required to provide survey and mapping control for location surveys under direction of Design Consultants, Location Surveyors or in support of Idaho Transportation Department Location Sections.

C5a. Aerial Mapping - Photogrammetric Mapping and Services

This area of service includes photogrammetric mapping, stereoscopic plotting, digital terrain modeling (DTM), LIDAR, digital orthographic photography, and aerotriangulation, bridging, and analytics. The mapping accuracy and scale of completed manuscripts will be specified for the type of project and required results. All mapping data will be field audited. Hard Surface Data and Field Audit Data collected will be incorporated into the map data.

C5b. Aerial Mapping - Surveying for Mapping

This area of service includes surveying for aerial mapping, control surveying, location surveying, GPS surveying, running levels, locating, placing, and surveying aerial photography pre-marks, and field audits of map data.

C6. Subsurface Utility Engineering (S.U.E.)

Establish the location of existing underground utilities within prescribed boundaries on various projects. Work will include all necessary research, field investigations, test holes, plotting, design analysis, CADD file preparation and recommendations relative to impacts on existing or proposed utility systems. Traffic control shall conform to the Manual on Uniform Traffic Control Devices for Streets and Highways as adopted by the State

D. ARCHITECTURE

Possible areas of service include: Remodel or restoration of existing buildings; Construction of new facilities.

D1. Building Design

Idaho professional architect registration required. Possible areas of service include:

Preliminary Design: Prepare preliminary designs to indicate design concept, code requirements, materials incorporated and overall dimensioning. Indicate traffic flow, parking, walkways and vegetation areas on site plan. Prepare preliminary cost estimate.

Design Development: Prepare building cross sections, coordinate structural, mechanical, electrical and civil engineering concepts with a revised cost estimate. Prepare outline specification.

Construction Documents: Prepare plans and specifications for bid documents. Prepare final construction cost estimate.

Historic Restoration: Specific expertise in the restoration of sensitive historic buildings.

Bidding: Answer questions during bidding, conduct prebid conference and prepare addendum as required.

Construction Observation: Review shop submittals, make periodic site visits to observe construction and issue directives to the contractor. Review pay requests for compliance. Conduct final acceptance walk through and prepare a final punch-list. Review Operations and Maintenance Manuals.

D2. Building Inspection

Idaho or ICBO certification for building inspection required.

Possible areas of service: Attend preconstruction meeting, review plans, specifications and shop submittals. Conduct periodic inspections during construction to assure materials are installed in accordance with codes and the construction plans and specifications. Note discrepancies in construction and inform the architect and owner.

D3. Landscape Design

Idaho professional landscape architect registration required. Possible areas of service include:

Preliminary Design: Prepare site development design to indicate vegetation, concepts, site drainage, and irrigation pattern and site stabilization solutions.

Contract Documents: Prepare landscape site plans indicating locations and types of vegetation, ground cover, irrigation systems, drainage and slope stabilization. Prepare specs for construction documents.

D4. Interior Design

Possible areas of service include: Prepare space plans indicating layout of modular work stations or furniture. Assist in planning modular work station components and color coordination. Prepare specifications for bid documents.

D5. Mechanical Design

Idaho professional engineer/mechanical engineer registration required. Possible areas of service include:

Preliminary Design: Prepare preliminary designs to indicate design concept, code requirements, materials proposed.

Design Development: Coordinate with architectural, electrical, structural and civil engineering plans. Develop outline specifications and cost estimate.

Construction Documents: Prepare plans and specifications for bid documents. Prepare final construction cost estimate.

Bidding: Answer questions during bidding and prepare addendum as may be required.

Construction Observation: Review shop drawing, submittals and make periodic site visits to observe construction and issue directives to the contractor. Review Operations and Maintenance Manuals.

D6. Electrical Design

Idaho professional engineer/electrical engineer registration required. Possible areas of service include:

Preliminary Design: Prepare preliminary designs to indicate design concept, code requirements, materials proposed.

Design Development: Coordinate with architectural, structural, mechanical and civil engineering plans. Develop outline specifications and cost estimate.

Construction Documents: Prepare plans and specifications for bid documents. Prepare final construction cost estimate.

Bidding: Answer questions during bidding and prepare addendum as may be required.

Construction Observation: Review shop drawing, submittals and make periodic site visits to observe construction and issue directives to the contractor. Review Operations and Maintenance Manuals.

D7. Structural Design/Analysis

Idaho professional engineer/structural engineer registration required. Possible areas of service include:

Preliminary Design: Prepare preliminary designs to indicate design concept, code requirements, materials proposed.

Design Development: Coordinate with architectural, electrical, mechanical and civil engineering plans. Develop outline specifications and cost estimate.

Construction Documents: Prepare plans and specifications for bid documents. Prepare final construction cost estimate.

Bidding: Answer questions during bidding and prepare addendum as may be required.

Construction Observation: Review shop drawing, submittals and make periodic site visits to observe construction and issue directives to the contractor.

Analysis: Analyze structural systems in existing facilities for integrity or modifications for remodeling, restoration or additions.

E. ENVIRONMENTAL

Services include highway-related environmental services performed in accordance with procedures outlined in the ITD Design Manual and the ITD Environmental Manual.

E1. Environmental Report Documentation and Management

Consultant will provide concise documentation organized in an approved format (environmental impact statements/ROD, categorical exclusion, and environmental assessments/FONSI, Section 4(f) statements). Specific issues of concern may be subconsulted out to qualified firms/individuals. Consultant must provide qualifications and experience in public involvement, and provide the best example of a finished report.

E2. Noise Studies

Includes highway traffic noise related environmental services for Type I projects (new location, substantial alignment change, or addition of a through-traffic lane) performed in accordance with procedures set forth in 23 CFR 772 “Procedures for Abatement of Highway Traffic Noise and Construction Noise”; June 1995 USDOT/FHWA guidance entitled “Highway Traffic Noise

Analysis and Abatement Policy and Guidance"; and the ITD Design Manual Appendix A.2 entitled "Noise Abatement". Documentation includes preparation of information useful to local jurisdictions regarding their land use planning and zoning efforts relative to projected traffic noise levels whether project impacts are identified or not.

E3. Air Quality Analysis

Possible areas of service include determination of level of air quality analysis required through use of ITD screening criteria. Preparation of project level air quality analysis when required.

E4. Wetlands

Wetland delineation, wetland mitigation plans, section 404 permit application preparation.

E5. Water Quality Analysis, Hydrology Stormwater and NPDES

Possible areas of service include preparation of hydrologic studies, water quality analysis, storm water analysis, preparation of Stormwater Pollution Prevention plans, and preparation of erosion and sedimentation plans.

E6. Biological Studies

Includes Endangered Species Act compliance, preparation of Biological Assessments, monitoring plans, mitigation plans, biological studies, stream restoration, etc.

E7. Archaeological/Cultural

Possible areas of service include environmental services performed in accordance with procedures outlined in the ITD Design Manual consisting of an archaeological evaluation, including survey and report production, historical site evaluation, and determination of eligibility, preparation of Section 4(f) statements for FHWA approval and surveys, verification and documents necessary for compliance under Section 106 of the Historic Preservation Act.

E8. Hazardous Materials/Waste

Possible areas of service include environmental services performed in accordance with procedures outlined in the ITD Design Manual consisting of an environmental evaluation such as a site investigation assessment (all phases) and remediation for hazardous waste, underground storage tanks, asbestos, PCB's, and other potentially contaminated sites or structures. Investigative capabilities should include nonintrusive methods as well as intrusive methods. The sampling of soil, water, structural materials, and unknowns for analysis to determine contamination levels or hazardous waste status in compliance with EPA and DEQ requirements.

E9. Visual Assessment

Provide visual inventory and visual analysis to support planning models.

F. TRANSPORTATION PLANNING

F1. Public Involvement

Provide models, strategies and procedures for effective public involvement in regard to the department's projects, programs and plans.

F2. Public Relations

Provide expert assistance/advice in the art and science of public relations and communication strategies with the public and media.

F3. Public Opinion Research

Provide public opinion polling/surveying on transportation issues.

F4. Photography

Provide professional photographs for department projects, publications, and promotions.

F5. Videography

Provide video production including editing, 3D animation, and digital video effects for department projects and promotions.

F6. Graphic Arts

Provide graphic design services including conceptual support, design of logos, brochures and other publications, and technical production assistance.

F7. Studies and Plans

Highway Needs Study - Road inventory & data collection, economic analysis, highway finance, funding shortfalls, cost responsibilities & revenue distribution, publish report and give presentations.

Scenic Byway Corridor Management Plans – Work with local government officials and interest groups to develop a plan to protect scenic corridors while allowing for growth and economic development, publish plan, and make presentations.

Corridor Planning – Collaborative process by which ITD, in partnership with local communities and interested citizens, develops a long-range (20 year) plan for state highway corridors. Corridor plans must be developed in accordance with the *Idaho Corridor Planning Guidebook.* The plans combine the technical elements of policy planning and traffic engineering with local concerns, needs and land uses.

Highway Modal Plan – Gather data, establish and manipulate data bases, run models, prepare maps and gather public input on all features of the highway system, present and future.

Strategic Planning and Economic Forecasting- Consultant must be well versed in the principles of strategic planning in the public sector. Must have a public sector financing/budgeting/ forecasting background.

Idaho Transportation Plan – Consultant must be well experienced in knowledge of federal requirements and facilitating long-range (20 years+) transportation planning efforts. Make presentations/facilitate meetings and publish reports.

Rail and Intermodal Planning – Consultant must have experience with statewide and project-specific rail planning, intermodal transportation planning and conducting intermodal facility feasibility studies. Make presentations, facilitate meetings and publish reports.

Interstate Point of Access Studies - Consultant must have knowledge of federal requirements and experience in conducting a study. Make presentations and publish reports.

Bicycle/Pedestrian Plan – Consultant must have knowledge of federal requirements and experience in assembling data and producing a statewide plan. Make presentations, facilitate meetings and publish reports.

Asset Management – A framework by which an agency's policy, goals and objectives are achieved through integrating the transportation features with those objectives and with innovative investment strategies.

Travel Demand Modeling – Projecting the results of proposed transportation improvements and civic infrastructure growth using the four-step process: trip generation, distribution, mode choice, and assignment.

F8. GIS Mapping, Database Design and Application Development-

The Consultant must possess demonstrated knowledge, skills and abilities in use of GIS/CAD software. Required skills range from the ability to generate digital and hardcopy map products to spatial analysis of transportation and environmental conditions using GIS/CAD tools. The Consultant may be asked to assist with the development of specialized databases and/or provide expertise in the integration of existing spatial and tabular data stores. Additionally, the Consultant may be asked to provide guidance to a variety of ITD employees in the development of their GIS capabilities.

F9. Visualization Services

Provide 2D, 3D, and 4D Services. 2D includes graphics for concept development and public information. 3D includes terrain modeling and photo simulations. 4D supports interactive, real-time applications.

G. CONSTRUCTION ENGINEERING & INSPECTION

G1. Project Management

Consultant shall have specific training and experience in the management of highway construction projects that employ the use of Federal-aid funding. The Consultant shall demonstrate through past experience that they have the expertise to 1) conduct constructability reviews, 2) conduct pre-bid conferences (this includes the ability to interface with contractors during the bidding phase of the project), 3) conduct pre-construction conferences, 4) manage the day-to-day administration of highway construction projects, including the management of inspection staff and project documentation, 5) present the project at completion to the Department for final review and acceptance, and certify that all work has been done in accordance with the policies and procedures of the Idaho Transportation Department and Federal Highway Administration.

G2. Partnering

Consultant shall demonstrate experience and training in the use of construction partnering. This includes the participation in the partnering process and a demonstrated commitment in the use of this process for disputes resolution.

G3. Value Engineering

Consultant shall demonstrate his experience in the Value Engineering process. The services in this area may include constructability reviews, re-engineering workshops, facilitation and/or participation on value engineering teams.

G4. Claim Analysis

Consultant shall demonstrate experience in the analysis of construction claims including entitlement, quantum and schedule analysis. Consultant must have broad experience in engineering and construction, and shall demonstrate a complete working knowledge in the area of construction contract law. A Professional Engineering license is preferable but is not required. Consultant need not be a licensed attorney.

G5. Audit

Consultant shall demonstrate experience in auditing construction claims for the purpose of cost verification. Consultant must also demonstrate knowledge and experience regarding federal procurement regulations and allowable costs. CPA license is required.

G6. Construction Inspection

The Consultant shall have the required inspector qualifications as outlined in Section 114 of the Contract Administration Manual, and experience in the day-to-day inspection common to heavy highway construction.

G7. Construction Materials Testing

The Consultant shall have the required Sampler/Tester (WAQTC) qualifications as outlined in Section 114 of the Contract Administration Manual, and experience in the field sampling and testing common to heavy highway construction. All equipment used in the testing process will meet the requirements of ITD's Laboratory Qualification Program

H. GEOTECHNICAL/MATERIALS

Idaho professional engineering license required.

H1. Project Development

Prepare Materials Phase Reports as outlined in the ITD Design and Materials Manuals. Other possible areas of service include plan sheet and proposal preparation.

H1a. Materials Report - Phase 1

Produce Materials Phase 1, Geology Reconnaissance reports.

H1b. Materials Report Phase 2

Produce Materials Phase 2, Soil reports.

H1c. Materials Report Phase 3

Produce Materials Phase 3, Pavement reports.

H1d. Materials Report Phase 4

Produce Materials Phase 4, Foundation Investigation reports for structures.

H1e. Materials Report Phase 5

Produce Materials Phase 5, Special Provision report.

H1f. Pavement Rehabilitations

Produce special reports on pavement rehabilitation projects. Analyze results from non-destructive testing and prepare engineering report of the results; provide asphalt and Portland cement concrete designs.

H1g. Geotechnical Engineering

Produce special geotechnical reports, such as reports on land slides, cut slope stability, corrections for settlement, liquefaction problems, etc.

H2. Subsurface Investigation

H2a. Drilling and Sampling

Perform all types of subsurface investigations, including drilling and digging test pits. Obtain disturbed and undisturbed samples. Perform field tests such as SPT, Cone Penetration, vane shear, etc. Install and monitor geotechnical monitoring instrumentations, such as piezometer, inclinometer, etc.

H2b. Exploration Supervision and Analysis

On site supervision during subsurface investigation, includes logging bore holes or test pits, keeping field records, directing investigation activities, etc. Analyzing data from subsurface investigation, field and lab test results.

H3. Materials Laboratory Testing

Perform various AASHTO, ASTM, and ITD standard tests on materials such as concrete, hot mix asphalt, aggregate, paint, soils, rock, steel, etc. Must be AASHTO accredited or qualified through ITD's Laboratory Qualification Program including Sampler / Tester qualifications.

H4. Non-Destructive Testing for Pavements

Perform non-destructive testing of pavements and structures. Tests may include Ground Penetrating Radar, Falling Weight Deflectometer, Locked Wheel Skid test, Impact Echo, Profiling, Pavement roughness, etc. Provide test records, analysis of test results, recommendations, etc.

J. INTELLIGENT TRANSPORTATION SYSTEMS

J1. Planning

Provide planning and guidance for future implementation and deployment of ITS technologies in accordance to the National ITS Architecture and NTCIP Standards. Provide preliminary cost analysis.

J2. Design

Design any or all phases of implementation and deployment of ITS technologies in accordance with the National ITS Architecture, NTCIP Standards, the ITD Design Manual, the Manual on Uniform Traffic Control Devices as adopted by the State, and the ITD Traffic Manual.

J3. Implementation/ Deployment

Provide guidance for implementation and deployment of ITS technologies in accordance to the National ITS Architecture, NTCIP Standards, the ITD Design Manual, the Manual on Uniform Traffic Control Devices as adopted by the State, and the ITD Traffic Manual.